

**Caution:** Parts can be damaged by electrostatic discharge. Keep parts in their containers until needed. Ensure you are properly grounded when touching static-sensitive components.



**Note:** This part is not hot-swappable. It is necessary to power down the library to replace this part.

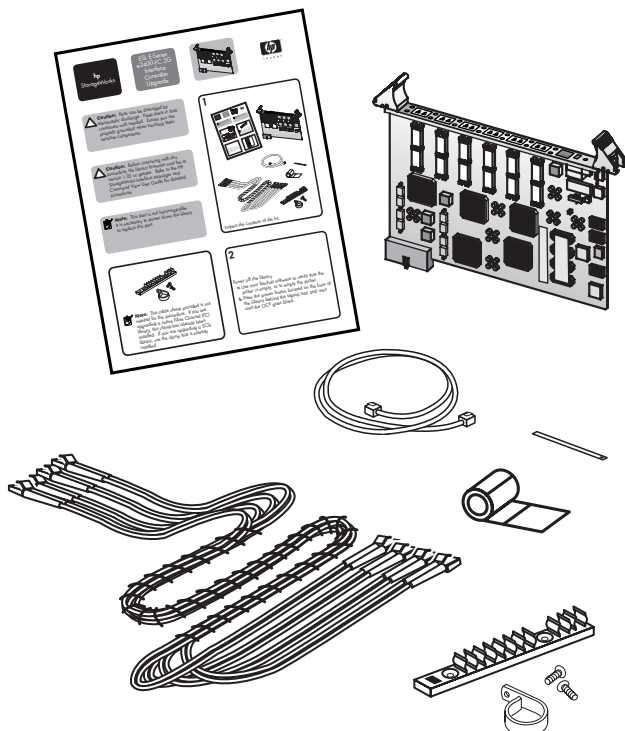


**Caution:** Before continuing with this procedure, ensure the following components are upgraded to the necessary firmware versions:

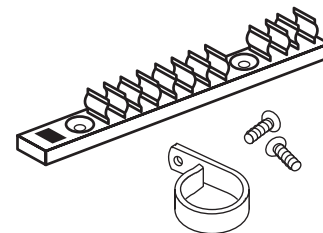
- library: 1.02 or greater
- Interface Manager: I130 or greater
- Command View ESL: 1.3.00 or greater

Refer to the *HP StorageWorks Interface Manager and Command View User Guide* for detailed procedures on checking firmware revisions and making updates.

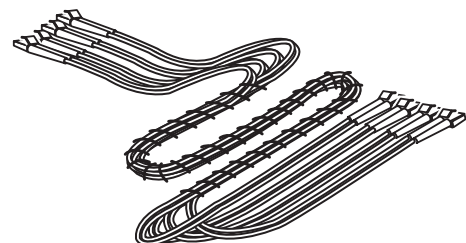
1



Inspect the contents of the kit.



**Note:** These parts are only needed during the initial library installation with native Fibre Channel (FC) drives, and they will not be used as part of this procedure. For more information, refer to the *HP StorageWorks ESL E-Series Unpacking and Installation Guide*.



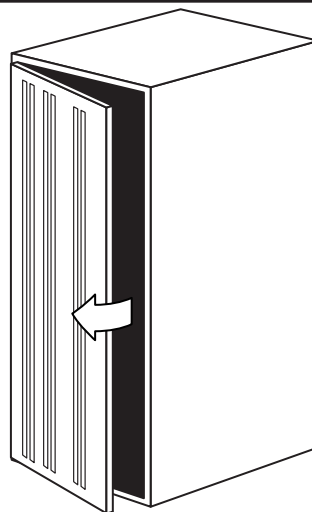
**Note:** These FC cables are not used if your library contains only LTO4 tape drives.

2

Power off the library.

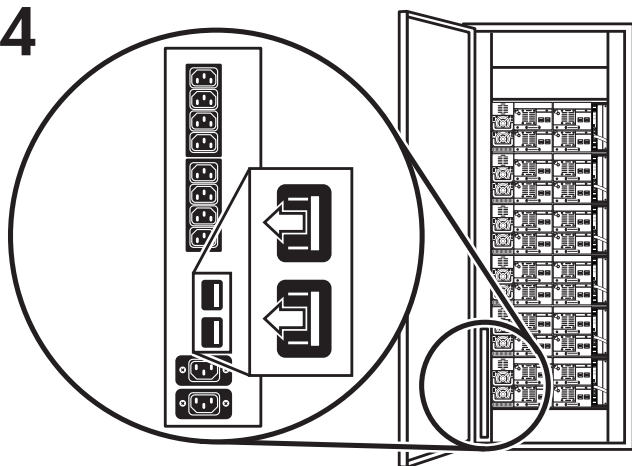
- a. Use your backup software to verify that the picker is empty, or to empty the picker.
- b. Press the power button located on the front of the library and wait until the OCP goes blank.

3



Open the back door of the library.

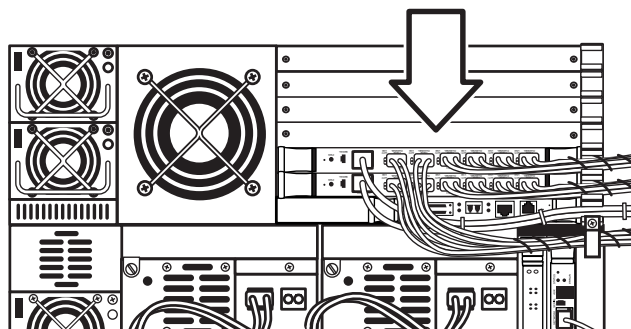
4



Flip the two breaker switches off (to the left) at the power distribution unit.

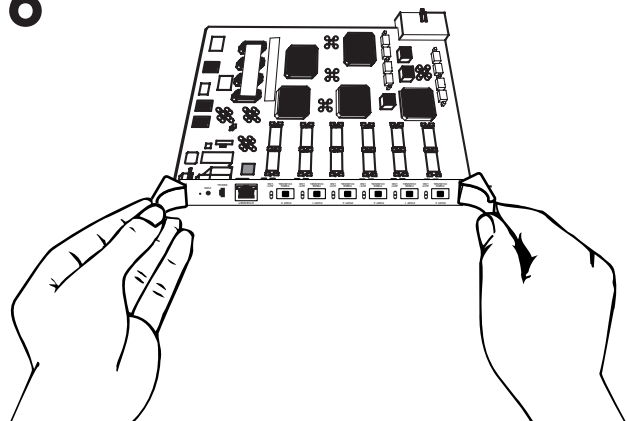
5

### Controller Installation



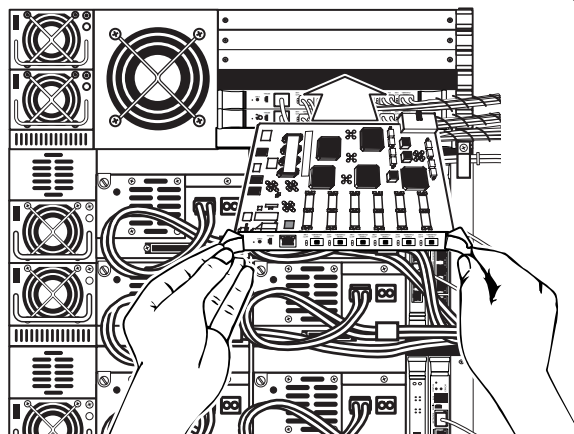
Using a #1 Phillips screwdriver, remove the blank plate from the next available of the top six slots in the card cage.

6



Hold the ejector handles so they extend toward the outer edges of the controller.

7



With the FC ports located to your right as you face the back of the library, slide the controller into the card cage slot. Tighten the ejector handle screws.

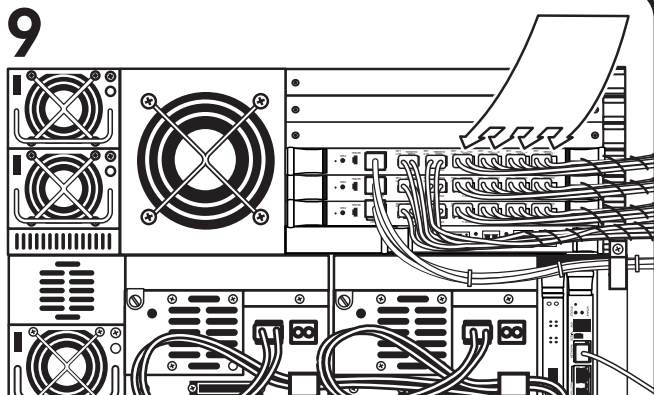
8

## FC Cable Configuration

Drive	TD Port
A	0
B	1
C	2
D	3

FC cables are labeled near their connectors to indicate which TD port to connect to each port on the interface controller. Plan to first connect the FC cables to the interface controller, then route them through the cabinet, and finally, connect them to the drive.

9

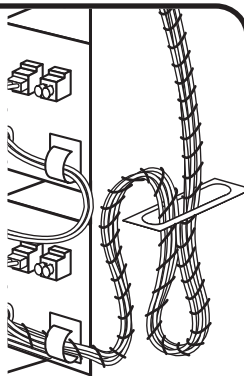


Connect each FC cable to the appropriately labeled TD port on the interface controller. Once connected, insert the FC cable bundle into the cable clip to the right of the card cage.

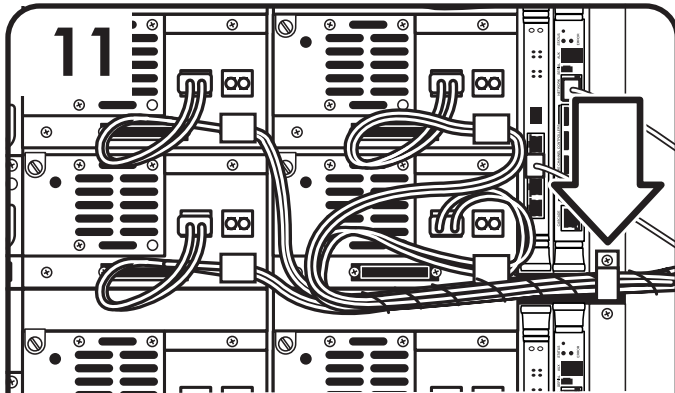
10

Route the cable through the cable access holes in the sheet metal on the right of the library cabinet.

For drive clusters 0 through 2, dip the excess cable length down into the upper cable access hole. For drive clusters 3 through 5, route the cables up through the lower and upper access holes. Push the first set of cables to the back of the library to create space for additional cables. This will help prevent the cables from becoming tangled.

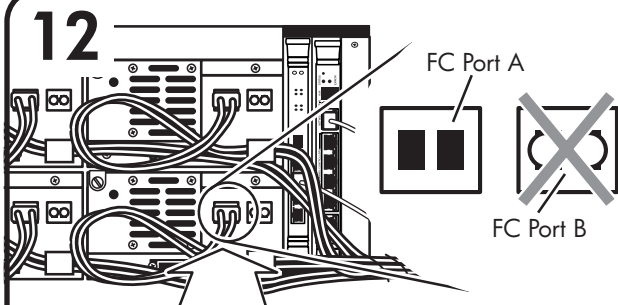


11



Using a #2 Phillips screwdriver, remove the screw from the clamp located on the lower right side of the drive cluster. Route the FC cable bundle through the clamp, then secure the clamp to the cluster frame by replacing the screw.

12



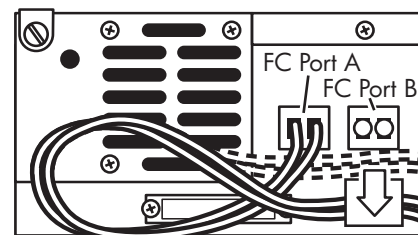
Remove FC port A end caps from the drive if present and attach the FC cable. Be sure to use the cable appropriately labeled for the drive, identified as A, B, C, or D.



**Note:** Use FC port A only.

B	A
D	C

13

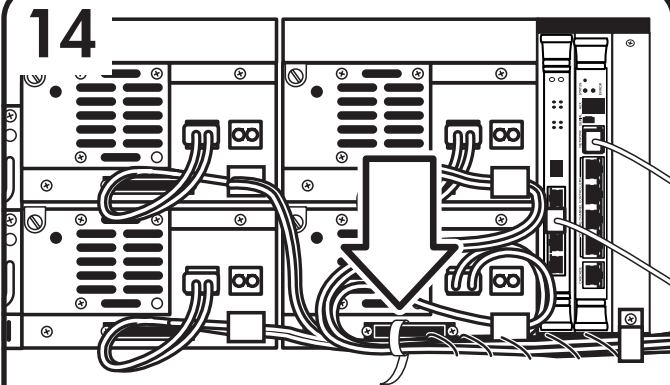


Insert the FC cable into the cable clip.



**Caution:** To avoid damaging the FC cable, do not sharply bend or pinch the cable. Allow a radial bend when attaching the FC cable to the cable clip.

14



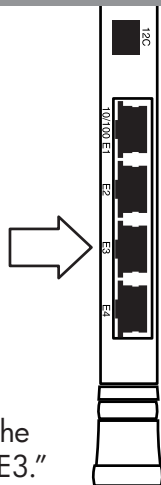
To help keep the FC cables clear of the drive cluster below, attach the cables to the drive handle on the lower right drive in the cluster using the tie wrap provided.



**Note:** You can use the labels provided to indicate which drive cluster the FC cables are interfacing with. Attach one label to each end of the cables.

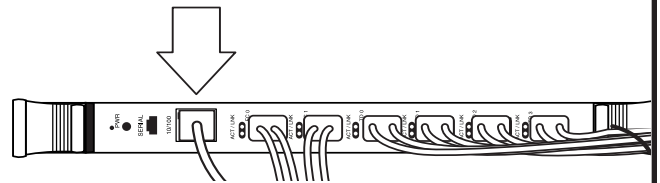
15

## Ethernet Cable Connection



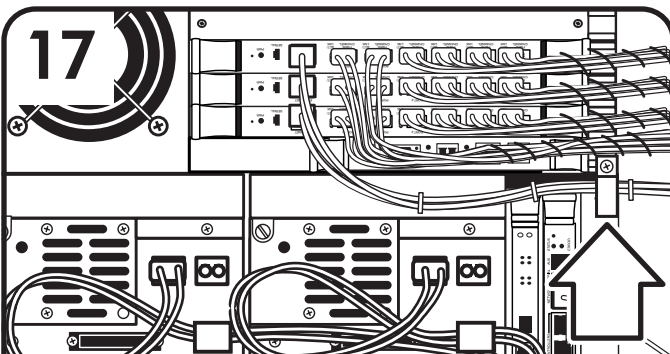
Connect the Ethernet cable to the cluster controller card at port "E3."

16



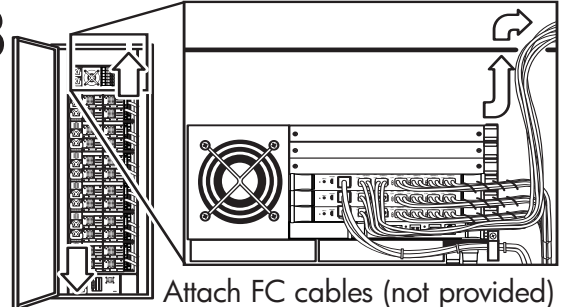
Connect the other end of the Ethernet cable to the Ethernet port on the corresponding e2400-FC 2Gb interface controller.

17



Locate the small cable clamp on the upper right corner of the first cluster frame. Using a #2 Phillips screwdriver, remove the screw from the clamp. Place the Ethernet cable in the clamp, then secure the clamp to the cluster frame by replacing the screw.

18

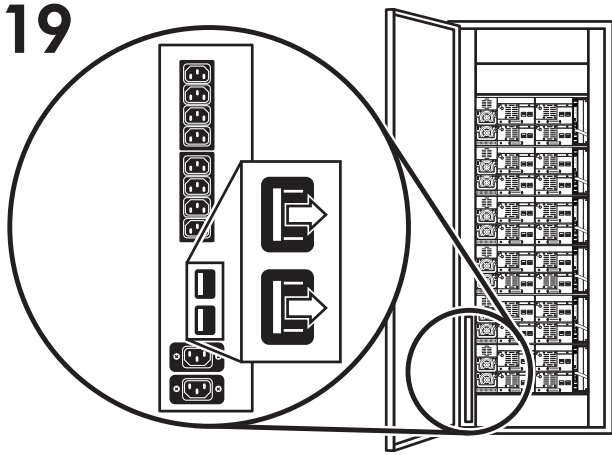


Attach FC cables (not provided) to the remaining interface controller FC ports. Route them through access holes on the top or bottom of the library cabinet and to a switch or an HBA.



**Note:** Use the labels provided to indicate which drive cluster the FC cables are interfacing with. Attach one label to each end of the cables.

# 19



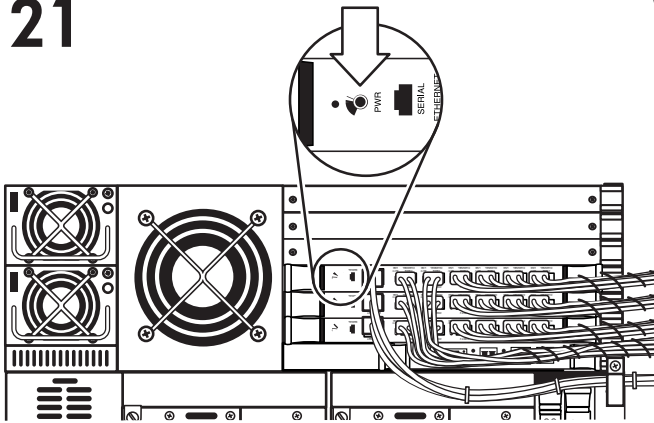
Flip the two breaker switches on at the power distribution unit.

# 20

Power on the library.

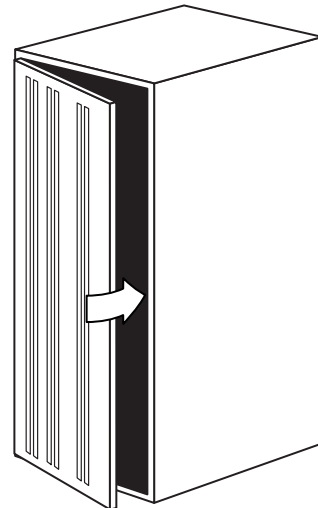
- Verify that power cables are firmly in place.
- Press the power button located on the front of the library.
- After several minutes, verify that the current state of the library appears in the System State display on the OCP (System On-line or System Off-line).

# 21



Verify that the power LED and Fibre link LEDs on the controller are solid green. The link LEDs indicate a good connection.

# 22



Close the back door of the library.

# 23

## Configuration

Use HP StorageWorks Interface Manager command-line interface or HP StorageWorks Command View TL to verify detection of the new controller, and to perform configuration and firmware updates.

Refer to the *HP StorageWorks Interface Manager and Command View TL User Guide* for detailed procedures.

## Getting help

- HP product information:  
<http://www.hp.com/go/storage>
- HP technical support and phone numbers:  
<http://www.hp.com/support>
- HP StorageWorks Library and Tape Tools (L&TT) diagnostic software:  
<http://www.hp.com/support/tapetools>
- Interface Manager and HP StorageWorks Command View TL:  
<http://www.hp.com/support/cvtil>
- HP manuals:  
<http://www.hp.com/support/manuals>

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